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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,146	01/03/2002	Boris Bronfin	MM4500	7431
1109	7590	03/07/2006	EXAMINER	
ANDERSON, KILL & OLICK, P.C. 1251 AVENUE OF THE AMERICAS NEW YORK,, NY 10020-1182			IP, SIKYIN	
		ART UNIT	PAPER NUMBER	
		1742		

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/038,146	BRONFIN ET AL.	
	Examiner	Art Unit	
	Sikyin Ip	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 8/25/05;12/19/05.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,4-8,11,12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,4-8,11,12 and 14 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

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DETAILED ACTION

DETAILED ACTION

Double Patenting

The terminal disclaimer filed on January 13, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of USP 6139651 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4-8, 11, and 14 are rejected under 35 U.S.C. 103 as being unpatentable over USP 6139651 to Bronfin et al (See col. 8, Tables 1 and 2, examples 1-4 for Mg based alloy compositions and intermetallic compounds; col. 4, lines 65-67 for mischmetal; col. 5, lines 48-62 for creep properties; and col. 6, lines 47-50 for die-casting; Table 8, examples 6-9; PTO-1449).

Bronfin discloses the features including the claimed Mg based alloy compositions and intermetallic compounds. The features relied upon described above can be found

in the reference(s) at col. 8, Tables 1-2, examples 1-4 and Tables 4 and 8. MCR at temperature 135 °C and 85 MPa can be calculated from Tables 4, examples 4-5 and Table 8, examples 6-9, which the MCR range overlaps the range in instant Table 4. Although MCR range at 150 °C and 50 MPa has not been disclosed by Bronfin, it is contemplated within ordinary skill artisan that recited MCR at 150 °C and 50 MPa would have been inherently possessed by the Mg alloy of Bronfin as is evinced by MCR range disclosed by Bronfin at 135 °C and 85 MPa.

With respect to the Be content, that Bronfin is 0.0001 wt.% higher than the claimed 0.0004 wt.%. However, it is well settled that a *prima facie* case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the *prima facie* case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. *Hoch*, 428 F.2d 1343-44, 166 USPQ 406 at 409.

Claims 1, 4-8, 12, and 14 are rejected under 35 U.S.C. 103 as being unpatentable over US 2001/0023720 to Ohori et al.

Ohori discloses Mg alloy composition in [0017] to [0036] and creep test data in [0078], [0085], and Table 3, embodiment 16 and Table 4, test embodiment 2 and comp. embodiment 9 except for the intermetallic compounds. However, the instant die-casting

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Mg based alloy composition are overlapped by the cited reference; consequently, the properties as recited in the instant claims would have inherently possessed by the teachings of the cited reference because intermetallic compounds are material properties. Therefore, the burden is on the applicant to prove that the product of the prior art does not necessarily or inherently possess characteristics attributed to the claimed product. *In re Best*, 195 USPQ, 430 and MPEP § 2112.01.

"Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, *In re Best*, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' *In re Spada*, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977)."

With respect to the Al content, that Ohori et al is 0.1 wt.% lower than the claimed 6.1 wt.%. However, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the prima facie case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. *Hoch*, 428 F.2d 1343-44, 166 USPQ 406 at 409.

Claims 1, 4-6, 11, 12, and 14 are rejected under 35 U.S.C. § 103 as being unpatentable over EP 1127950 (PTO-1449).

EP 1127950 discloses the features including the claimed die-casting Mg based alloy composition, proof stress, and minimum creep rate (EP '950, abstract, [0035], [0076], and Table 3). Therefore, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed in a prior art reference because the prior art reference finds that the prior art composition in the entire disclosed range has a suitable utility. Also see MPEP § 2131.03 and § 2123.

Response to Arguments

Applicant's arguments and declaration filed August 25, 2005 have been fully considered but they are not persuasive.

Applicants' argument in paragraph bridging pages 5-6 of instant remarks is noted. But, applicants failed to substantiate their position with factual evidence by 132 declaration.

Applicants' argument in page 6, first full paragraph of instant remarks is noted. But, applicants' attention is directed to Tables 4 and 8, examples 4-9 of Bronfin which have yield strength range overlapping the range as claimed. With respect to the claimed MCR at 150 °C that Bronfin discloses MCR range at temperature 135 °C and 85 MPa as calculated from Tables 4, examples 4-5 and Table 8, examples 6-9, overlaps the range in instant Table 4. Although MCR range at 150 °C and 50 MPa has not been

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disclosed by Bronfin, it is contemplated within ordinary skill artisan that recited MCR at 150 °C and 50 MPa would have been inherently possessed by the Mg alloy of Bronfin as is evinced by MCR range disclosed by Bronfin at 135 °C and 85 MPa. In re Best, 195 USPQ, 430 and MPEP § 2112.01.

Applicants' argument as set forth in paragraph bridging pages 6-7 of instant remarks is noted. But, applicants fail to show claimed Sr and Be contents are critical for recited intermetallic compounds.

Applicants' argument as set forth in paragraph bridging pages 7-8 of instant remarks is noted. But, applicants' attention is directed to Tables 4 and 8 and rejection above that examples 4-9 have shown the claimed yield strength range. Furthermore, the calculated MCR range [at 135 °C and 85 MPa is well overlapped the range in instant Table 4. Therefore, claimed MCR range at 150 °C and 50 MPa would have been inherently overlapped by alloy of Brofin.

Applicants' argument with respect to Ohori is noted. But, the instant claimed features are overlapped by the features of said reference. With respect to claimed Al content, that 6.1 wt.% is found no patentable distinct from 6.0 wt.%. It is well settled that a *prima facie* case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, *In re Titanium Metals Corporation of America v. Banner*, 227 USPQ 773 (Fed. Cir. 1985), *In re Woodruff*, 16 USPQ 2d 1934, *In re Hoch*, 428 F.2d 1341, 166 USPQ 406 (CCPA 1970), and *In re Payne* 606 F.2d 303, 203 USPQ 245 (CCPA 1979). To overcome the *prima facie* case, an applicant

must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. Hoch, 428 F.2d 1343-44, 166 USPQ 406 at 409.

Applicants argue Ohori failed to disclose the claimed Ca and Sr contents.

Applicants' attention is directed to abstract of Ohori.

Applicants argue that Ohori does not disclose the claimed yield strength and creep rate. Applicants' attention is directed to [0078] and Table 3, samples 16 and 21, for examples.

Applicants' argument with respect to 0.1 wt% difference of Al is noted. But, applicants have not substantiated their position by factual evidence.

Applicants' argument as set forth in second full paragraph in page 9 of instant remarks is noted. But, unexpected results/criticalities must be established by factual evidence. Mere argument or conclusory statements in the specification is not sufficient. In re Geisler (CA FC) 43 USPQ2d 1362 (7/7/1997) and Ex parte Gelles, 22 USPQ2d, 1318. Comparison must be done under identical condition except for the novel features of the invention. In re Brown, 173 USPQ 685 and In re Chapman, 148 USPQ 711. The showing of unexpected results must be occurred over the entire claimed range. In re Clemens, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980). The scope of the showing must be commensurate with the scope of the claims. MPEP § 716.02(d), In re Tiffin, 448 F.2d 791, 792 (Fed. Cir. 1971), In re Coleman, 205 USPQ 1172, In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983), and In re Greenfield, 197 USPQ 227. General superiority cannot be inferred from the results obtained using a

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single embodiment of the claimed invention, *In re Greenfield*, 197 USPQ 227, 230 and MPEP 2144.08 (B). The property or result relied upon must be disclosed in the specification or flow naturally from the teaching of the specification. *In re Slocombe*, 184 USPQ 740, 743 and *In re Davies and Hopkins*, 177 USPQ 381 (CCPA 1973).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The above rejection relies on the reference(s) for all the teachings expressed in the text(s) of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only specific portion(s) of the text(s) have been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

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All recited limitations in the instant claims have been met by the rejections as set forth above.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SIKYIN IP
PRIMARY EXAMINER
ART UNIT 1742

S. Ip
March 5, 2006